

REMARKS

Claims 1-79 are currently pending in this application. Applicant has withdrawn claims 28-79, without prejudice in response to a restriction requirement. Reconsideration is respectfully requested in light of the above claim amendments and the following remarks.

35 U.S.C. § 102 Rejections

The Examiner has rejected claims 1-4, 8-9, 13-17, 22 and 27 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,593,431 to Sheldon. Applicant respectfully traverses this rejection.

Applicant's claimed invention as recited in independent claims 1 and 14 is directed towards a method and corresponding apparatus for performing automatic pacing interval optimization for each of a plurality of different body positions. For example, independent claim 1 recites a method comprised in part by pacing a patient's heart using a plurality of different pacing intervals at each of a plurality of body positions and measuring a corresponding hemodynamic response for each of the plurality of different pacing intervals. The method further recites determining at least one preferred pacing interval, for each body position, based at least in part on the hemodynamic information. (Underlining added for emphasis only). Applicant respectfully submits that Sheldon does not disclose or suggest the recited claim elements.

Rather, Sheldon discloses a rate responsive pacemaker having one or more sensors to detect body position and activity level which are used to set physiologic pacing rates appropriate for the patient's body position and activity level. (Sheldon, col. 5, lines 34-41). For example, the rate responsive

pacemaker of Sheldon utilizes an activity count (corresponding a particular level of activity) to trigger the determination of the body position and to select a target rate appropriate to the estimated level of exercise in the determined body position. Sheldon further discloses that the target rate for pacing the patient's heart is proportional to the activity count and varies between the programmed pacing lower and upper rates in a manner well known in the art. (Sheldon, col. 13, lines 26-42). Thus, Sheldon simply discloses a rate responsive pacer using one or more DC accelerometers to detect activity and body position to deliver therapy at a physiologically appropriate rate, i.e. simply that pacing rate varies with position and exercise.

Sheldon does not however disclose or in any way suggest pacing a patient's heart using a plurality of different pacing intervals at each of a plurality of body positions and measuring a corresponding hemodynamic response for each interval to determine a preferred pacing interval, for each body position, based on at least in part of the hemodynamic information as recited in claims 1 and 14 of the present application. Accordingly, Applicant respectfully submits that claims 1 and 14 are novel and unobvious over Sheldon and are therefore allowable. Applicant further submits that claims 2-13 and claims 15-27 that depend from claims 1 and 14 respectively are allowable as are claims 1 and 14 and for additional limitations recited therein.

35 U.S.C. § 103 Rejections

The Examiner has rejected claims 5 and 18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,593,431 to Sheldon. The Examiner also rejected claims 10-12 and 23-26 under 35 U.S.C. § 103(a) as being

unpatentable over U.S. Patent 5,593,431 to Sheldon in view of U.S. Patent 5,354,317 to Alt. Applicant respectfully traverses these rejections.

In view of the foregoing analysis of independent claims 1 and 14 in view of Sheldon, Applicant believes that the rejection of dependent claims 5, 10-12, and claims 18 and 23-26 under §103 is rendered moot as claims 5, 10-12 and claims 18 and 23-26 depend from allowable independent claims 1 and 14 respectively.

In light of the above claim amendments and remarks, it is respectfully submitted that the application is in condition for allowance, and an early notice of allowance is requested.

Pursuant to 37 C.F.R. 1.136(a)(3), Applicant hereby requests and authorizes the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 22-0265.

Respectfully submitted,

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